

PSYCHOLOGY

Anti-Intellectualism

Nine distinguished scholars, after studying United States, conclude that anti-intellectualism reaches into almost every corner of life, but that it is not a new phenomenon.

► ANTI-INTELLECTUALISM in the United States is deep-rooted, widespread, here for some time to come and deplorable. Its most glaring manifestation in recent years has been McCarthyism.

These are the general conclusions culled from reports by nine distinguished American scholars, who were asked whether or not the United States is suffering from a disease that shows up as a distrust and dislike for learned men, such as scientists and professors.

The reports, edited and concluded by Drs. S. Stansfeld Sargent of Barnard College and Theodore Brameld of New York University for the Society for the Psychological Study of Social Issues, point out that anti-intellectualism is not new and is as old as the nation itself.

In addition, it is explained, anti-intellectualism reaches into almost every corner of life today, "into the interpersonal relations of the family, into schools and colleges, into all the media of communication, into business and labor relations, into the physical as well as the social sciences, and of course far beyond the boundaries of our own country."

This deep-rooted distrust and dislike has its surface examples.

The most glaring is McCarthyism, Drs. Sargent and Brameld point out, "with all that this implies beyond the mere individual whose name may have become, unfortunately, immortalized."

Another manifestation reported is the distrust of intellectuals in government which has its ups and downs according to the numbers of scientists and professors in a position of power in the nation's capital.

Fear, insecurity and frustration are at the root of much of the trouble, the two editors say. The corollary to this, they state, is "the pressure toward conformity which, in a time of seemingly endless international tension, is painfully severe."

The nine scholars had varying degrees of remedy for the present situation. They warn intellectuals from becoming hysterical, as well as against fighting among themselves.

"They are reminded that, despite all handicaps, their influence today is doubtless greater and their position in the culture more respected than in any earlier period of our history.

"They are reminded, too, that they have themselves to blame for some of the troubles from which they suffer, the lack of responsibility that not a few of them reveal toward the practical world of affairs being but one example, their compartmentalizing habits being another."

In conclusion, Drs. Sargent and Brameld state in the *Journal of Social Issues* (Vol. XI, No. 3, 1955) that the assessment, although very limited, is an optimistic one.

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ASTRONOMY

See Venus in Daytime Soon

► VENUS can be seen in the daytime about 4:00 p.m., March 15, weather permitting.

The pale crescent of the young moon is the guide. When outside, face to the right of south, and high up in the sky the crescent moon can be seen. The planet Venus is about six moon diameters to the left, scientists at the Hayden Planetarium, New York, report.

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METEOROLOGY

How Clouds Make Rain

► A BLOW at rain makers is seen in a new explanation of how clouds make rain by two University of Chicago meteorologists.

Their theory casts serious doubt on how effective certain cloud seeding methods are. They have found that rain from summertime clouds most often results from giant chemical particles in the air, either salt or sulfates, rather than from ice particles as has been thought.

If natural rain occurs without formation of ice crystals, then throwing silver iodide or other chemicals, about which ice crystals might form, into clouds to induce or increase rain is not likely to be of much use.

Dr. Roscoe R. Braham and Louis J. Battan studied some 2,000 clouds over Puerto Rico, the Midwest and the Southwest. Inside a cloud, they found, the giant salt or sulfate particles pick up moisture from cloud droplets so small that up to 10,000,000 of them are needed to make a single raindrop.

As the particles pick up more and more water from the cloud, they unite and grow, finally forming drops large enough to fall and picking up more cloud droplets as they plunge toward earth.

This mechanism is responsible for most rain in the tropics and in the eastern half of the United States, Dr. Braham and Mr. Battan conclude. They are not yet sure how rain in such semi-arid zones as Arizona is produced.

Previously, the usual explanation as to



ROBOT READER—This laminated iron and copper unit is the "eye" and "hand" of a new data-processing system designed by Datamatic Corp., Newton Highlands, Mass. Magnetic tape storing the information passes over the device shown here, at a rate of 100 inches per second.

why rain occurred relied on the presence in the cloud of tiny ice crystals that formed around minute dust nuclei. The crystals began forming, it was believed, when cloud tops were higher than the freezing level, which may reach to 30,000 feet.

Water vapor from the cloud droplets froze on the crystals, which fell as snow until they reached a melting level.

Counting against this ice crystal theory are two factors:

It does not explain rains in the tropics nor a large proportion of rains in the Midwest.

It does not allow sufficient time for crystal growth in short-lived clouds that nevertheless produce rain.

Dr. Braham and Mr. Battan first became interested in uncovering another explanation for rain formation several years ago while conducting experiments in which radar was used to detect rain the moment it formed inside clouds.

They found rain occurred at altitudes well below those where freezing might be expected.

An intensive study of cloud physics was therefore started, with support of the Air Force. Records of flights through clouds were kept, including their major physical appearances, and particles and cloud droplets were collected in special filters.

Raindrops fall at a speed of about 500 to 1,000 feet a minute.

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